

COMPLETE LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A process for preparing a graphite article, the process comprising
 - (a) mixing (i) a particulate fraction comprising at least about 35 weight percent coke, coal or mixtures thereof having a diameter such that a major fraction passes through a 25 mm mesh screen but not a 0.25 mm mesh screen, (ii) a pitch binder and (iii) carbon fibers, to form a stock blend;
 - (b) extruding the stock blend to form a green stock;
 - (c) baking the green stock to form a carbonized stock; and
 - (d) graphitizing the carbonized stock by maintaining the carbonized stock at a temperature of at least about 2500 degree C,

wherein the fibers are added to the stock blend after at least about 50% of the mix cycle is completed, to produce a graphite article having increased strength and decreased brittleness mixing has begun.

2. (original) The process of claim 1 wherein the fibers have an average length of no more than about 32 mm.

3. (canceled)

4. (currently amended) The process of claim 1 or 3 wherein the fibers are added to the stock blend after at least about 75% of the mix cycle is completed.

5. (original) The process of claim 1 wherein the carbon fibers are present at a level of about 0.5 to about 6 parts by weight of carbon fibers per 100 parts by weight of calcined coke.

6. (original) The process of claim 5 wherein the carbon fibers have a tensile strength of at least about 150,000 psi.

7. (currently amended) The process of claim 5 wherein the carbon fibers have a Young's modulus of at least about 15×10^6 psi.

8. (original) The process of claim 5 wherein the carbon fibers have an average diameter of about 6 microns to about 15 microns.

9. (original) The process of claim 1 wherein the particulate fraction comprises materials selected from the group consisting of calcined coke, petroleum coke, coal derived coke, calcined anthracite coal or mixtures thereof.

10. (original) The process of claim 1 wherein the particulate fraction comprises up to about 65% of a filler comprising at least about 75% coke

having a diameter such that at least about 70% will pass through a 200 Tyler mesh screen.

11. (original) The process of claim 10 wherein the coke in the filler has a diameter such that at least about 90% will pass through a 200 Tyler mesh screen.

12. (original) The process of claim 10 wherein the filler comprises between about 0.5% and about 25% of additives.

13. (original) The process of claim 12 wherein the additives comprise iron oxide having an average particle diameter such that they are smaller than about 10 microns, petroleum coke having an average particle diameter such that they are smaller than about 10 microns, and combinations thereof.

14. (original) The process of claim 1 wherein the particulate fraction comprises at least about 50 weight percent coke, coal or mixtures thereof having a diameter such that a major fraction passes through a 25 mm mesh screen but not a 0.25 mm mesh screen.

15. (currently amended) A process for preparing a graphite article, the process comprising

(a) mixing (i) a particulate fraction comprising at least about 35 weight percent calcined coke, coal or mixtures thereof having a diameter such that a major fraction passes through a 25 mm

mesh screen but not a 0.25 mm mesh screen, and up to about 65% of a filler comprising at least about 75% calcined coke having a diameter such that at least about 70% will pass through a 200 Tyler mesh screen and (ii) a pitch binder, to form a stock blend;

- (b) extruding the stock blend to form a green stock;
- (c) baking the green stock to form a carbonized stock; and
- (d) graphitizing the carbonized stock by maintaining the carbonized stock at a temperature of at least about 2500 degree C.

to produce a graphite article having reduced brittleness.

16. (original) The process of claim 15 wherein the coke in the filler has a diameter such that at least about 90% will pass through a 200 Tyler mesh screen.

17. (original) The process of claim 15 wherein the filler comprises between about 0.5% and about 25% of additives.

18. (original) The process of claim 17 wherein the additives comprise iron oxide having an average particle diameter such that they are smaller than about 10 microns, petroleum coke having an average particle diameter such that they are smaller than about 10 microns, and combinations thereof.

19. (original) The process of claim 15 wherein the particulate fraction comprises at least about 50 weight percent coke, coal or mixtures thereof having a diameter such that a major fraction passes through a 25 mm mesh screen but not a 0.25 mm mesh screen.
20. (original) The process of claim 15 wherein the stock blend further comprises carbon fibers.
21. (original) The process of claim 20 wherein the fibers are added to the stock blend after mixing has begun.
22. (original) The process of claim 21 wherein the fibers are added to the stock blend after at least about 50% of the mix cycle is completed.
23. (original) The process of claim 22 wherein the fibers are added to the stock blend after at least about 75% of the mix cycle is completed.
24. (original) The process of claim 20 wherein the fibers have an average length of no more than about 32 mm.
25. (original) The process of claim 20 wherein the carbon fibers are present at a level of about 0.5 to about 6 parts by weight of carbon fibers per 100 parts by weight of calcined coke.
26. (original) The process of claim 24 wherein the carbon fibers have a tensile strength of at least about 150,000 psi.

27. (original) The process of claim 24 wherein the carbon fibers have a Young's modulus of about 15×10^6 psi.

28. (original) The process of claim 24 wherein the carbon fibers have an average diameter of about 6 microns to about 15 microns.

29. (canceled)